sion is the cause of a great deal of unhappiness. It is difficult to ascertain how this belief originated. We frequently meet patients with vision reduced to 50 per cent or less who have been waiting from ten to thirty years for their cataracts to mature before being operated upon. This, too, at a time in life when every year makes the remaining span of life shorter and when the patient needs his eyes for the pursuit of normal activities of business or household duties, as the case may be. When the vision in the best eye has fallen to 50 per cent or less, one's ordinary activities become increasingly hampered and the cost, from an economic standpoint, is very great.

When a patient first presents incipient cataract it is probably justifiable to put such a patient on dionin and iodids or any other treatment that may seem indicated, providing the vision has not fallen below 50 per cent in the better eye. The value of drugs or any nonsurgical procedure is questionable. We have thoroughly tried out radium and lens extract and given them up, and in the early cases use only dionin and iodids. But when vision has fallen below 50 per cent and the patient cannot pursue his ordinary business or social activities we operate immediately. Naturally we prefer to perform an intracapsular operation on all immature cataracts. But if the intracapsular operation is contraindicated we do not hesitate to perform a capsulotomy, with the two following exceptions: one, in complicated cataracts in which there existed a previous uveitis and, two, in diabetic cataracts. In these we prefer an intracapsular extraction even at the risk of losing vitreous. The subsequent iritis is much less frequent in an intracapsular operation than one done by the capsulotomy method.

It is a great mistake to postpone the extraction of an unripe uncomplicated senile cataract even if one is only able to perform the capsulotomy method. In fact there are usually less complications following the extraction of such a lens than there is following a morgagnian or intumescent cataract. With attention to a few details no bad results need be feared. First, we consider it poor surgery to do a simple extraction even if followed by a Hess iridectomy, except in cases of traumatic cataracts in minors when the nucleus is very small. Secondly, we make a full half corneal section. This we have been doing since 1914 and have had no cause to regret it. The two former procedures have similar effect on the eyes in that they cause too much trauma and leave too much lens matter behind. If the section is too small the sharp edges of the incised cornea and sclera brush off a great deal of cortex which escapes detection and remains in the eye to cause iritis and secondary cataract. Voerhoff has shown that about 10 per cent of all patients have a positive lens reaction. In the case of the simple extraction the sphincter, even if dilated, also brushes off lens cortex, besides causing severe trauma to the iris. The next consideration is the capsulotomy. Here again less trouble will be encountered if a capsule forceps be used rather than a cystotome. It is only by removing a large portion of the anterior capsule that the extrusion of the lens is facilitated as well as giving access to the aqueous to expedite the absorption of the remaining cortex. In our capsulotomy cases we push atropin and salicylates internally to avoid iritis.

1801 Bush Street.

THE LURE OF MEDICAL HISTORY

BERNARDINO RAMAZZINI

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THAT old Italian mediaeval university at Padua, famous for its teachers and students—Versalius, Harvey, and many others—called Bernardino Ramazzini as professor of physic in 1700, the year he published his book, "De Morbis Artificum Diatriba."

He was, as Graham Crookshank stated, a great scholar, master teacher, and acute observer like Sydenham; possessed the wit to see the insufficiency of Galenic generalization; the curiosity and imagination of the true scientist; and yet, failing to grasp the logic of Galileo, Bacon or Harvey, fell back on tags of scholasticism and the follies of the Hippocratic school. Notwithstanding his philosophic trend of thought, this original investigator is considered the father of industrial hygiene.

Ramazzini was born at Capri, near Modena, on November 5, 1633. Going to Parma for his classic course in literature, he later received his degree of M. D. in 1659. After his graduation he went to Rome, then to the Duchy of Castro, where he was married, and later, in 1671, moved to Modena, where his genius was discredited by the malice of professional colleagues. He became professor of physic at University of Modena, which position he held for eighteen years, when he was called to Padua, where he remained until his death in 1714.

The first English translation from the Latin of his work, "Diseases of Tradesmen," appeared in London in 1705. The front page reads thus: "Showing the various influences of particular trades upon the state of health; with the best methods to avoid or correct it, and useful hints proper to be minded in regulating the cure of diseases incident to tradesmen."

Ramazzini "thought the various and numerous diseases produced in artificers by exercise of their respective trades were derived principally from two causes: First the noxious quality of the matter on which they work, and by breathing out noxious steams and subtle particles which are offensive to human nature, gives rise to particular diseases; and in the next place certain violent and disorderly motions and improper postures of the body, by which the natural structures of the vital

machine are so undermined as gradually to make way for certain distempers."

His observations of writer's cramp, his differentiation of diseases of camps, his insistence, in season and out, on fresh air, cold water, simple living and wholesome domiciles were far ahead of his age. While his pathology, pharmacology, and therapeutics have been superseded by modern science, the accuracy of his observations were epoch-making.

There is a fine humanity about the passages, free from any taint of the ludicrous, on the diseases of some fifty tradesmen in his book, "such as live by particular exercises and callings," and include the metal diggers, gilders, painters, corpse bearers, fullers, midwives, and many other artificers.

In one of his forty-three chapters, that on the diseases of the metal diggers and of the diseases of gilders, he reviews the work of several observers of the great past: such as Hippocrates, Pliny, Agricola, Fallopius, Kircherus. His careful observations in regard to the evils of these two trades, such as "tremblings, pallor, griping of the guts, vertigo, palsy, and the falling out of the teeth," all classic symptoms of mercurialism, were believed by him to be due to this metal's "spirits."

It is interesting to note the preventive measures advocated to "avoid the sucking in of smoak in their mouths by turning their backs to the wind when gilders fired amalgam" (mercury fumes).

Ramazzini on one occasion treated a young gilder for two months who was confined to his death bed. He pointed out the cachexia, the swollen eyes, difficult breathing, and the stupid mind. The patient had "stinking ulcers in the mouth which voided incessantly a very great quantity of ugly, nasty matter, without a feverish symptom." An excellent description of mercurial salivation!

His method of deduction is illustrated by the following quotation: He became concerned to know "why mercury which when given internally was so effective for worms in children, should when subjected to fire give off such pernicious exhalations as to knock men down when received by the mouth and nostril." The great danger from mercury fumes on account of the finer disintegration of the poisonous metal is today being combated by modern hygienic measures.

He was also aware that the grinding of lead, the making and the firing of glaze in pottery works, produced among the workers various symptoms: "The use of their limbs taken away from 'em, discolored complexions, their vision grown hard and having melancholic fits," all symptoms of plumbism.

Another of his greater observations was in regard to the disease of the stone cutters. His attention was attracted by the dust these workers inhaled, and he noted they were "usually troubled by cough and many of 'em turned asthmatic and consumptive." In stone cutters who had died asthmatic he found at postmortem that in running the knife through the pulmonary structures he thought he was cutting some sandy body. Our present-day knowledge of silicosis has added but little more to the astute observations of this early worker in occupational diseases.

Ramazzini was a good epidemiologist, and described the outbreak of lathyrism at Modena in 1690, the malarial epidemics of the region, and the Paduan cattle plague of 1712. He was a meteorologist of some note. Among his collected works are the "Opera Omnia Medica et Physiologica and Physica." Italy has done eponymic honor to his memory by the medical journal which bears his name published on the two hundredth anniversary of his death in 1914. A celebration patronized by the king and by scientific men from Europe and abroad fittingly took place at Milan at the famous Clinica del Lavora, an institution entirely devoted to the study and care of occupational diseases, in memory of Bernardino Ramazzini. The founder of this clinic, Professor Devota, had a medal struck off to commemorate this event. One cannot but admire the man who, breaking through the conventions of centuries, thought it no indignity to learn of scavengers and pit diggers.

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